

Claims

- [c1] 1. A method of preparing an imaged composite, the method comprising the steps of:
 - (a) applying a layer of a gel coat composition to at least one surface of a substrate comprising a composite material;
 - (b) curing the gel coat composition; and
 - (c) transferring a sublimatable dye to the cured gel coat to obtain the imaged composite.
- [c2] 2. The method according to claim 1, wherein the gel coat composition comprises one or more crosslinkable components.
- [c3] 3. The method according to claim 2, wherein the one or more crosslinkable components cross-link with the composite material or with each other during curing.
- [c4] 4. The method according to claim 1, wherein the curing step is conducted at a temperature in the range of about 50°F– 750°F.
- [c5] 5. The method according to claim 1, wherein the gel coat composition comprises unsaturated polyester resin, styrene monomer and methyl methacrylate.

- [c6] 6. The method according to claim 5, wherein the gel coat composition comprises 32–62% unsaturated polyester resin, 28–48% styrene monomer and 2–14% methyl methacrylate.
- [c7] 7. The method according to claim 1, wherein the gel coat composition comprises an unsaturated polyester resin in the range of 42–52%.
- [c8] 8. The method according to claim 1, wherein the gel coat optionally comprises a catalyst that accelerates curing of the gel coat composition.
- [c9] 9. The method according to claim 1, wherein the gel coat composition is pigmented or unpigmented.
- [c10] 10. The method according to claim 1, wherein the thickness of the cured gel coat is in the range of about 1 mil to about 100 mil.
- [c11] 11. The method according to claim 10, wherein the thickness of the cured gel coat is in the range of about 10 mil to about 25 mil.
- [c12] 12. The method according to claim 1, wherein the gel coat is thermally-cured or cured by radiation.
- [c13] 13. The method according to claim 1, wherein the com–

posite material comprises a filler and a matrix.

- [c14] 14. The method according to claim 13, wherein the filler comprises a material selected from the group consisting of fibers, particulates, fabrics and mixtures thereof.
- [c15] 15. The method according to claim 13, wherein the matrix comprises of a material selected from the group consisting of canvas, ceramic, cement, glass, metal, plastic, and wood.
- [c16] 16. The method according to claim 13, wherein the matrix comprises a polymeric resin matrix.
- [c17] 17. The method according to claim 16, wherein the polymeric resin matrix comprises a thermoset or thermoplastic resin.
- [c18] 18. The method according to claim 16, wherein the polyester resin matrix is reinforced with glass fiber.
- [c19] 19. The method according to claim 13, wherein the composite comprises a gypsum cement or synthetic marble.
- [c20] 20. The method according to claim 1, further comprising the step of applying a top coat onto the imaged composite.
- [c21] 21. The method according to claim 20, wherein the top

coat is transparent or translucent.

- [c22] 22. The method according to claim 20, wherein the thickness of the top coat is in the range of about 0.1 mils to 10 mils.
- [c23] 23. The method according to claim 20, wherein the top coat comprises a material selected from the group consisting of a polyester, epoxy, conversion lacquer, water-borne, nitrocellulose, urethane, acrylic, paint, shellac, varnish, enamel, synthetic penetrating oil, nitrocellulose transparent lacquer, acrylic transparent lacquer, acrylic transparent latex, post-catalyzed conversion varnish, polyester, and polyurethane.
- [c24] 24. The method according to claim 20, wherein the step of applying a top coat is repeated.
- [c25] 25. An article prepared according to any one of claims 1-24.